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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ADDY, ANTHONY S

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,046

Applicant(s)

GUSTAFSSON ET AL.

Examiner

ANTHONY S. ADDY

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- Paper No(s)/Mail Date 12/17/2007.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to applicant's amendment filed on March 28, 2008.

Claim 11 has been cancelled. **Claims 1-10** are now pending in the present application.

Response to Arguments

2. Applicant's arguments with respect to **claims 1-10** have been considered but are moot in view of the new ground(s) of rejection. Arguments are directed to newly added limitations and the new ground(s) of rejection based on the newly added limitations follow below.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lundin, U.S. Publication Number 2001/0003093 A1 (hereinafter Lundin)** in view of **Lindgren et al., U.S. Patent Number 6,411,632 (hereinafter Lindgren)** or in view of **Applicant's Admitted Prior Art** (page 3, lines 1-27 of original disclosure).

Regarding claims 1 and 5, Lundin teaches a system (see Fig. 2) and a method (see Fig. 5) for obtaining the position of a mobile station (16) located in a current network of a communications system including a plurality of networks (*i.e.*, *local PLMN 47 and remote PLMN 50*) supporting different positioning protocols (see p. 2 [0022], p. 3 [0023], p. 4 [0028] and Figs. 1, 2 & 5), comprising: identifying at a location center (*e.g.*,

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MPC 52 or MPC 60) the current network (*i.e.*, local PLMN 47 or remote PLMN 50) of said mobile station (16) (see p. 2 [0022], p. 3 [0025] and p. 4 [0028]), and based on said identified current network (6), selecting among at least two protocols including an **IP-based protocol** and MTP/SCCP, frame relay, X25, or ATM protocols, a suitable positioning protocol (*e.g.*, **IP-based protocol** and MTP/SCCP, frame relay, X25, or ATM protocols) for communication of location information with said current network (6) (see p. 3 [0025-0026] and p. 4 [0028-0029]).

Although, Lundin fails to explicitly teach selecting among at least two protocols including an SS7-based protocol based on said identified current network, Lundin, however, teaches the use of a plurality of protocols, such as a positioning roaming protocol (PRP), IP based protocols, frame relay, ATM protocols *e.t.c.*, for supporting internetworking roaming and offering positioning services; and further teaches **a mobile positioning center (MPC) tailors position information based on an underlying protocol according to a particular system or network requirement** (see p. 3 [0023] and p. 4 [0028-0029]).

In an analogous field of endeavor, Lindgren teaches a network hub interconnects a first public access cellular telephone network and a second network, and the network hub includes processing means for converting signals from being carried by the SS7 protocol to the TCP/IP protocol and vice versa (see col. 2, lines 20-24). According to Lindgren, the adaptation layer within the network hub acts as a translation interface between the different protocols, and the conversion between transportation of the SS7 protocol or the TCP/IP protocol is performed by processing means within the network

hub, and enables connection between the first and second networks (see col. 4, lines 32-41).

Moreover, the prior art admitted by applicant, disclosed on page 3, lines 1-27 of the original disclosure of the present specification (hereinafter simply referred as “the Admitted Prior Art”) teaches a GMLC has information to select a SS7 protocol/IP protocol to be used in the communication of positioning data with a specific PLMN.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Lundin with the teachings of either Lindgren or the teachings of the Admitted Prior Art to include a method of selecting among at least two protocols including an SS7-based protocol based on said identified current network, in order to tailor position information based on an underlying protocol according to a particular system or network requirement.

Regarding claim 2, Lundin in view of Lindgren or the teachings of the Admitted Prior Art teaches all the limitations of claim 1. Lundin in view of Lindgren or the teachings of the Admitted Prior Art further teaches a method, where before identifying the current network of the mobile station, the method further comprises: receiving at said location center a positioning request (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), identifying the subscriber's home network, based on said identified home network (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), selecting a suitable positioning protocol for communication with said home network (see *Lundin*, p. 3 [0023 & 0025] and p. 4 [0028-0029] and *Admitted Prior Art*, page 3, lines 1-27), sending a routing information request to the home network, receiving an answer from the home

network, and analyzing the answer for identifying the current network of the mobile station (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]).

Regarding claim 3, *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art teaches all the limitations of claim 1. *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art further teaches a method, further comprising: sending a position information request to the current network, and receiving an answer including location information about the subscriber from the current network (see *Lundin*, p. 2 [0022], p. 3 [0026] and p. 4 [0028]).

Regarding claim 4, *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art teaches all the limitations of claim 1. *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art further teaches a method, wherein any of the SS7 protocol, MLP or IP roaming protocol is selected (see *Lundin*, p. 3 [0023 & 0025] and p. 4 [0028-0029]).

Regarding claim 6, *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art teaches all the limitations of claim 5. *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art further teaches an apparatus, further comprising: a receiving component and a sending component, wherein said receiving component is configured to receive a positioning request from an location services (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), wherein said processing component is configured to identify a home network for the subscriber; and based on said identified home network (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), select a suitable positioning protocol from said positioning protocols for communication with said home network (see

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Lundin, p. 3 [0023 & 0025] and p. 4 [0028-0029] and *Admitted Prior Art*, page 3, lines 1-27), said sending component is configured to send a routing information request to the home network, said receiving component is configured to receive an answer from the home network, and said processing component is configured to analyze the answer for identifying the current network of the mobile station (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]).

Regarding claim 7, *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* teaches all the limitations of claim 5. *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* further teaches an apparatus, characterised in that said sending component is configured to send a routing information request to the visited network, and said receiving component is configured to receive an answer including location information about the roaming subscriber from the visited network (see *Lundin*, p. 2 [0022], p. 3 [0026] and p. 4 [0028]).

Regarding claim 8, *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* teaches all the limitations of claim 5. *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* further teaches an apparatus, wherein said positioning protocols are any of the SS7 protocol, and/or GMLC-centric IP roaming protocol and/or location middleware IP roaming protocol (see *Lundin*, p. 3 [0023]).

Regarding claims 9 and 10, *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* teaches all the limitations of claim 1. *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* further teaches a computer program stored in a record medium, computer memory, or read-only memory and comprising executable

instructions which when executed cause a computer to perform the method of claim 1 (see *Lundin*, p. 4 [0028] and Fig. 5).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ANTHONY S. ADDY** whose telephone number is (571)272-7795. The examiner can normally be reached on Mon-Thur 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anthony S Addy/
Examiner, Art Unit 2617

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617